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A LONGITUDINAL ANALYSIS OF INFORMATION SOURCES, SOURCE
CREDIBILITY, AND GUBERNATORIAL VOTE

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ABSTRACT

Relationships between perceived voter use of information sources and perceived source credibility and gubernatorial candidate preference were examined in a cross-lagged correlation design employing data from Illinois primary and general election surveys. The only significant test-retest correlation for source use and believability was for newspaper credibility. The media use and credibility items were also uncorrelated with gubernatorial candidate preference at both primary and general elections and with post-general election vote reports. All cross-lagged correlations between media variables and candidate preference were non-significant. All test-retest correlations for candidate preference and political party preference were statistically significant. The findings suggest that the media use and credibility variables as measured by Roper-type questions are either sensitive to differing environments of primary and general election campaigns or are unreliable measures of media use and believability.

A LONGITUDINAL ANALYSIS OF INFORMATION SOURCES, SOURCE
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Since 1961, Roper (10) has been reporting the relative credibility assigned to news media and the extent to which they are each perceived as sources of news by the American public. These periodic reports have gained wide attention, not only because of the obvious importance of their subject matter, but because they constitute the only longitudinal data available on these variables. In general, Roper concludes that over the period 1959 to 1971, television has overtaken and surpassed newspapers as the source from which most people get most of their news. Over the same time period, according to the Roper data, television has become, by a rather wide margin, the most believable medium.

Of particular interest to political candidates, office holders, and political communication researchers is the fact that, in addition to the general questions on media use and credibility, Roper has attempted to assess media use at different electoral levels. After elections in 1964, 1966, 1968, and 1970 Roper asked his respondents:

During the last election campaign, from what source did you become best acquainted with the candidates for (city/town/county) offices--What about candidates for state office? And what about the candidates for national offices--the Senate and the House of Representatives? (10, p. 7)

Roper's respondents have consistently cited newspapers as the source from which they get most information about local candidates, with television second and other people third. At the state level, television is strongly

the first choice with newspapers second and people third. The same pattern holds at the national level with television widening its margin over newspapers and people dropping further behind. Taken at face value, these outcomes suggest that media use is perceived differentially at different electoral levels.

The study reported here investigates the relationship between electoral environment and perceived media use and credibility from another perspective. In every instance the Roper data have been gathered following a general election in both presidential and non-presidential years. To our knowledge, there are no data comparing perceived media use and media credibility data derived in a primary election environment with the same kind of data gathered in a general election environment. This, we believe, is a major deficiency in the literature, given the increasingly large number of primary elections and the obvious differences in the two electoral environments.

Primary elections tend to be lower in visibility with less money spent by each candidate than is the case with general elections. Primaries invite a choice between two candidates of the same party rather than between candidates of different parties. Thus, the powerful influence of partisan affiliation is neutralized along with its alleged tendency to serve as a filtering mechanism for political information. One would think that, in the absence of partisan cues, information from the media might make more of a difference in the candidate selection process. Moreover, there may be differences in the kind of information generated by primary electoral campaigns and there certainly are differences in the geographic origin of most primary versus general election news.

Primary election information tends to be of local or state origin while general election campaigns are covered extensively by the national media.

This was particularly true in the 1972 Illinois primary when the most hotly contested race was the Democratic gubernatorial race between Daniel Walker, former chairman of the commission that investigated the riots that occurred during the 1968 Democrat convention in Chicago, and Paul Simon, then the incumbent lieutenant governor. Walker literally walked from one end of the state to the other while Simon conducted a more conventional campaign. Thus, this study was designed to determine whether perceived media use and perceived media credibility vary from the primary election environment to the general election environment.

A second important impetus behind this study is our continuing interest in discerning the extent to which media use and credibility are related to voting behavior. In spite of several studies suggesting the contrary (2,6,7,12), there continues to be substantial numbers of political practitioners and academics who assume a direct relationship between media credibility and use and electoral outcomes. For example, DeVries and Tarrance (5) clearly associate, without intervening variables, what voters say about their use of the media, the believability of the media, and whether voters are more or less likely to split their tickets. Thus, a second question we pose here is: Do perceived media use and perceived media credibility relate any more directly to voting behavior in a primary election than to voting behavior in a general election?

Finally, we are concerned about the methodological integrity of the Roper-type question. Unfortunately, information on the psychometric reliability and the precision of the questions asked in the Roper studies apparently has not been reported. (3) Carter and Greenberg (4) indicate that the Roper technique of permitting multiple responses may constitute a bias

against newspapers. They found bias against newspapers in terms of media use but not in terms of the conflicting reports, or credibility, question.

Starch (15) utilized, in Finland, both the traditional Roper questions and the variations introduced by Carter and Greenberg and arrived at essentially the same conclusions.

Shaw (14) also questioned the Roper results, suggesting the possibility that, because the "most reliable medium" item always follows the "most relied upon medium" item, the results may be biased against the print media. After reviewing the Roper data and his own, Shaw concluded that "we can only guess what the public and the electorate mean by a credible medium." (14, p. 331)

Ryan (13) analyzed the perceived relationships between messages, their origin, and the medium of dissemination. He concluded that media credibility is related to the geographic origin and content of the message. Atwood and Sanders (1) found the perceived credibility of television, in a political context, to be one of the components of a television dimension while perceived believability of print media and radio formed a separate factor. For reasons not entirely clear, the credibility of television was perceived in different terms than was the credibility of other media.

Thus, in the following analysis, we compare media use and media credibility data gathered in a primary election environment with the same kind of data gathered from the same respondents in a general election environment. In both instances we study the relationships between these variables and voting behavior.

METHOD

Data from two surveys, one conducted in Southern Illinois immediately following the 1972 Illinois primary election (7), and one immediately prior

to the general election were used to assess the media variable-vote questions. The items were the traditional Roper-type questions, but respondents were restricted to one response for both the source "most used" and the source that would most likely be believed in case of "conflicting reports." Thus, the selection of any one source--television, newspapers, radio, magazines, other

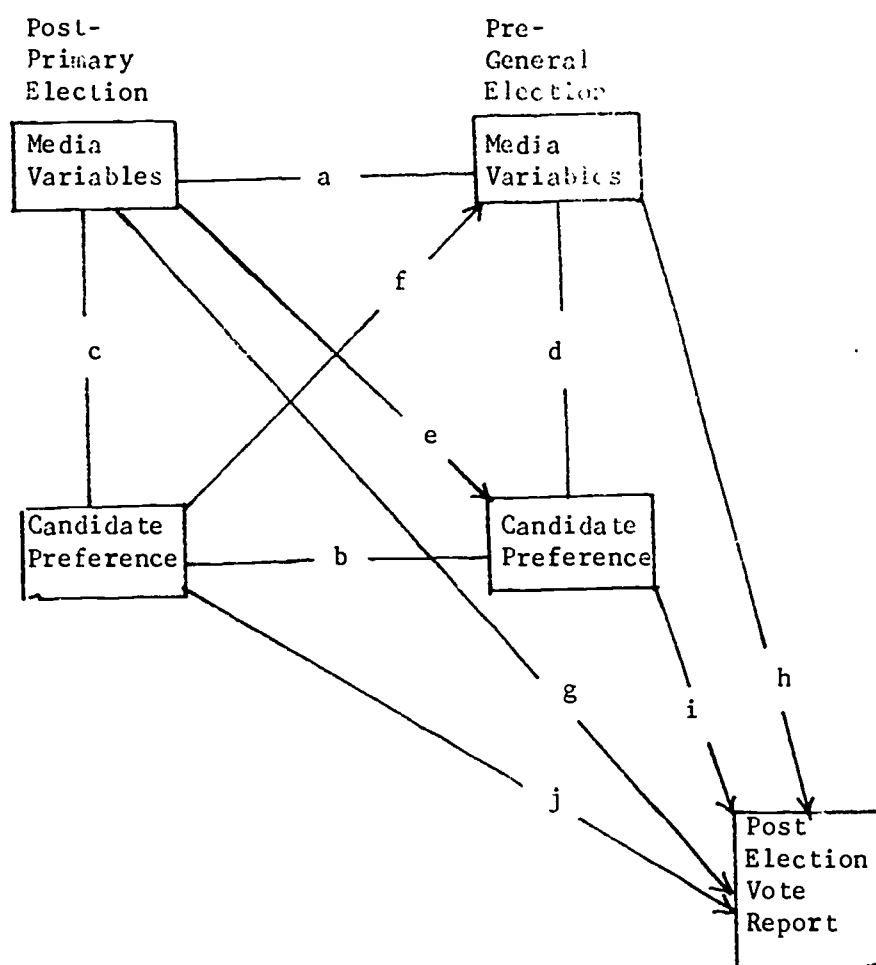


FIGURE 1. Schematic Representation of Relationships Among Variables.

people--precluded the selection of any other source. In addition, we obtained gubernatorial vote reports just after the primary, just before the general

election, and just after the general election (via telephone callback). The context of all questions was restricted to political campaign information. The post-primary and pre-general election data were collected via personal interviews. The general relationships among variables is outlined in Figure 1.

Thus, we have reported media use and believability data at two points in time and reported gubernatorial candidate preference at three points. These multiple measures allow us to examine the media and vote variables in a cross-lagged correlation panel design. The design permits analysis of the traditional relationships between media and media believability and candidate preference (c and d in Figure 1), the test-retest correlation of the media use and believability questions (a), and reported candidate preference (b). The design also permits questions to be asked about the independent effects of media use and believability on vote by examination of the time-lagged correlations (e) between primary election responses to media questions and general election responses to the candidate preference question. It further provides an opportunity to look for potential effects of candidate preferences on media by examination of the reverse lagged correlation (f) between primary election candidate preference and general election media use and believability responses. The design also allows us to analyze the reliability of the candidate preference report by examining the correlations between post-election vote reports and both primary (j), and pre-general election reports (i). Finally, it is possible to inspect the correlations between primary (g) and general election (h) media use and believability reports and the post-election vote reports.

Rozelle and Campbell (11) have pointed out that correlations are affected by time-lapse, and unless the $time_1$ and $time_2$ correlations (c and d) are equal,

within measurement error limits, a no-cause baseline must be computed before the lagged correlations (e and f) can be properly interpreted. The baseline for comparison is defined by:

$$\text{Baseline} = \frac{c + d}{2} \sqrt{\frac{a}{R_A} * \frac{b}{R_B}}$$

where: a, b, c, d are defined in Figure 1.
 R_A and R_B are the respective time₁ and time₂ internal reliability coefficients.

Since the variables under study are single item tests, it is impossible to compute meaningful internal reliability coefficients, and the best estimate of reliability of all variables are their test-retest correlations. As can be readily demonstrated, this reduces the term under the radical to unity, and the baseline becomes the arithmetic mean of the two synchronous correlations ($c + d/2$). There is, then, no way to estimate the effect of time on the correlation between media use and believability variables or on the reported candidate preferences except to inspect the observed correlations at the points of measurement.

Rozelle and Campbell also note that the longer the time lapse between test and retest the smaller should be the observed correlation due to attenuation over time. The order of magnitude for the candidate preference and vote correlations should be (see Figure 1):

$$i > b > j$$

FINDINGS

Of the 147 registered voters interviewed following the primary election,

only 72 could be traced through all three vote report periods. Of the five sources, only one respondent named radio as the most believable source following the primary, and no one named magazines as most believability. No respondent selected radio or magazines as the most used source for political information during the primary, and the following analysis is limited to television, newspapers, and other people. During the general election survey four of the panel respondents refused to answer the believability question on the grounds that it was "stupid" or "meaningless." Thus, the Ns for the believability questions are 68 instead of 72. Overall, six per cent of the 365 respondents in the general election survey refused to answer the "conflicting reports" question.

Among the media use and believability variables, only the test-retest correlation for newspapers as the most believable source in case of conflicting reports was significant ($r = .38, p < .001$). Further, none of the synchronous (c and d) or lagged correlations (e and f) between media use and believability variables and the candidate preference variables was significant. Considering the 30 zero-order correlations involved, this one significant test-retest value is about what we might expect by chance.

Two correlations, the synchronous g between primary campaign believability of other people and primary candidate preference (c) and the reverse lagged correlation between primary candidate preference and the believability of other people during the general election campaign (f) were identical and approached significance ($.05 < p < .10$). Both values are negative, and considering the order of the findings, these relationships may be worthy of additional study in future elections. Consistent with the non-significant outcomes reported above, there were no significant correlations between the

the media use and believability variables and the post-election vote reports. The number of stable responses and the number and proportion of changed responses for media use in the primary and general election environments are given in Table 1. Similar data for media believability are given in Table 2.

While information source use and believability do not correlate on a test-retest basis, the same does not appear true of candidate preference and vote reports. The correlations between primary candidate preference and general election candidate preference is .55, the correlation between primary candidate preference and reported general election vote is .53, and the correlation between general election candidate preference and post-election vote report is .80. The order of magnitude of these correlations is identical to what Rozelle and Campbell indicate we should expect.

$$\underline{i}=.80 > \underline{b}=.55 > \underline{j}=.53$$

The difference between (b) and (j) is non-significant as we might expect since the pre- and post-general election measures were taken within 10 days of each other and approximately eight months after the initial measure of candidate preference following the primary election. All three correlations are significant beyond the .001 level.

Since the vote reports are based on one item tests, as are the media use and believability variables, these outcomes lend support to the conclusion that the traditional media use and credibility questions are either responsive to the differences in the information and decision making environments studied or are unreliable measures. For either event, they are not significantly related to voting behavior.

In addition, reports of self-designated party preference from primary to general election are relatively stable compared with the media questions.

The test-retest correlations are given in Table 3 and party preference by reported candidate preference at the three reporting points is given in Table 4. These data indicate, as we would expect, that self-designated independents are less stable than are initial party adherents; 53.33 per cent of those who called themselves independents following the primary election identified with a party during the general election survey while only 13.64 per cent of the Republicans and 8.57 per cent of the Democrats reported changed allegiances from primary to general election.

Tracing the party preference-candidate preference changes we find the three voters who said they were Democrats at primary time and independents at the general election reported preference for and vote for the Democrat gubernatorial candidate at all three points. At the same time, three voters who claimed Democrat party preference at both the primary and general election reported voting for the Republican candidate.

The three respondents who said they were Republicans at the primary and Democrats at the general election reported voting for the Democrat candidate in the post-election callback as did three voters who reported Republican party affiliation in both primary and general election surveys.

Of the eight independents who switched, seven claimed to be Democrats in the general election survey and of the seven, six reported voting for the Democrat candidate. The other independent-Democrat switcher reported voting for the Republican candidate as did one independent who reported GOP allegiance in the general election survey. Of the seven stable independents, six reported voting for the Democrat and one for the Republican candidate. It appears that the self-designated independents tend to be heavily oriented toward voting Democrat regardless of what they claim to have as party

orientations. Overall, our respondents reported voting Democrat to a substantially larger extent than the election outcomes. About 72 per cent of our respondents reported a Democrat vote while the general election results were approximately 60-40 for the Democrat.

As noted above, only one of the test-retest correlations for media use and believability was significant, and none of the synchronous and lagged correlations reached statistical significance. The former finding indicates there are different patterns of media use and believability during primary and general election campaigns. The lack of significant synchronous and lagged correlations reinforces previous findings that source use and believability as measured by the Roper-type questions have virtually nothing to do with political candidate choices.

Examination of the patterns of source use and believability at the primary and general election periods shows significant differences that provide indirect support for the politician's contention that the two campaigns are different in style and technique. However, it must be recognized that the different source use and believability patterns may be functions of events unrelated to campaigns and may be, in terms of the use and believability items used, random outcomes. One might argue that within an election campaign the variables are stable and hence of some consequence. Unfortunately, we can shed no light on this issue. We have no test-retest data from within either the primary or general election campaign. But, even if the patterns of use and believability are stable within a campaign, they are unrelated to the candidate preference variable in either election environment.

The absence of significant correlations between media use and media believability and voting behavior comes as no surprise, given previous

research. How much one uses a given medium or the amount of confidence he expresses in it may relate to intervening variables such as one's agenda (9) or to the attitudes one holds toward parties and candidates (8). It is, however, theoretically simplistic to assume a direct relationship between media consumption and media credibility and electoral outcomes in any given election.

Table 5 shows the patterns of reported source use and Table 6 the patterns of reported source believability for the two campaigns. In both instances chi square is significant beyond the .05 level. Newspapers, television, and other people all receive equivalent amounts of reported use and believability during the primary, but the use of other people for political information drops to virtually nothing during the general election while use of newspapers drops slightly and use of television increases substantially. A similar pattern holds for reported believability of sources. People are reported as believable as newspapers and television during the primary but drop drastically during the general election. Newspapers appear to hold relatively better in terms of believability (as compared with use) from primary to general election. This finding was also indicated by the significant test-retest correlation of .38 for newspaper believability. Television's improved believability during the general election appears to be somewhat less than the reported increase in television use for political information.

SUMMARY

Analysis of reported media use and believability patterns showed differences between primary and general election environments. Perceived use and believability of television increased during the general election while reliance on and believability in newspapers and people dropped. These changes

may reflect real differences in the two environments or they may indicate that the traditional, single item response measure of these variables is unreliable.

Our findings also show no significant relationships between perceived media use, perceived media believability, and candidate preference in either electoral context. At the same time, test-retest correlations for candidate preference and political party affiliation were significant. The relationship between and among these variables is not direct. We suspect that some measures of media consumption and credibility would relate to "agenda" and/or to attitudes toward parties and candidates, but not to voting behavior.

In general, we interpret our results as a call for studies of differing electoral environments and their impact on political information processing and behavior.

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TABLE 1

Number of Respondents Reporting Each Medium as the Primary Source of Political Information During the Primary and General Election Campaigns.

Primary Election	General Election					Total	% Change
	Tele- vision	News- papers	Radio	Mag- azines	People		
Television	26	4	1	1	-	32 ^a	18.75
Newspapers	14	6	-	-	1	21	71.43
Radio	-	-	-	-	-	0	0.00
Magazines	-	-	-	-	-	0	0.00
People	15	3	-	1	-	19	78.95
TOTAL	55	13	1	2	1	72	

- a Read "of the 32 respondents who listed television as the primary source of information during the primary campaign, 26 said television was their primary source during the general election campaign while four switched to newspapers and one each to radio and magazines."

TABLE 2

Number of Respondents Reporting Each Medium "Most Believable" for Political Information in Primary and General Election.

Primary Election	General Election						Total ^b	% Change
	Tele- vision	News- papers	Radio	Mag- azines	People	Refused ^a		
Television	13	2	-	2	4	2	23	43.48
Newspapers	8	13	-	1	1	1	24	45.83
Radio	-	1	-	-	-	-	1	100.00
Magazines	-	-	-	-	-	-	-	0.00
People	15	4	-	1	3	1	24	37.50
TOTAL	36	20	0	4	8	4	72	

- a Four respondents refused to answer the believability question during the general election survey and indicated the question was "stupid" or "meaningless." Two had initially chosen television in the primary survey while one each had named newspapers and other people.
- b Read "of the 23 respondents who said television was "most believable" in the primary, 13 said it was most believable during the general election while two shifted to newspapers, two to magazines, four to other people, and two refused to answer the question during the general election survey.

TABLE 3
Correlations Between Reports of Self-
Designated Party Preference, Primary
to General Election.

Primary	General		
	Demo.	Repub.	Indep.
Democrat	.69	-.60	-.18
Republican	-.64	.87	-.20
Indep.	-.11	-.24	.45

TABLE 4

Candidate Preference by Self-Designated Party Preference Across
Three Interviews

Candidate Preference ^a	Party Preference				Total
	1	2	3		
				Demo. Repub. Indep. Switchers ^b	
D----D----D				28 - 4 11	43
D----R----D				1 2 - -	3
D----D----R				1 1 - 1	3
D----R----R				2 3 - 1	6
R----R----R				- 12 - -	12
R----D----R				- - - -	0
R----R----D				- - 1 -	1
R----D----D				- 1 2 1	4
TOTAL				32 19 7 14	72

a Candidate preference at the three interview times, primary (1), pre-general (2), and post-general (3). R=Republican, D=Democrat

b Respondents who indicated one party preference during the primary and another preference during the general election.

TABLE 5

Reported Primary Source of Information for
Primary and General Election Campaigns

	Print	TV	People	Total
Primary				
Election	30.6%	43.1%	26.3%	100.00%
n=	22	31	19	72
General				
Election	21.1%	77.5%	1.4%	100.00%
n=	15	55	1	71 ^a

a One person who preferred radio in general election dropped from the analysis

Chi square = 24.7, $p < .05$

TABLE 6

Most Believable Source of Information for
Primary and General Election Campaigns.

	Print	TV	People	Total
Primary Election	34.7%	33.3%	31.9%	100.0%
n=	25	24	23	72
General Election	35.3%	52.9%	11.8%	100.0%
n=	24	36	8	68

Chi square = 10.4, $p < .05$

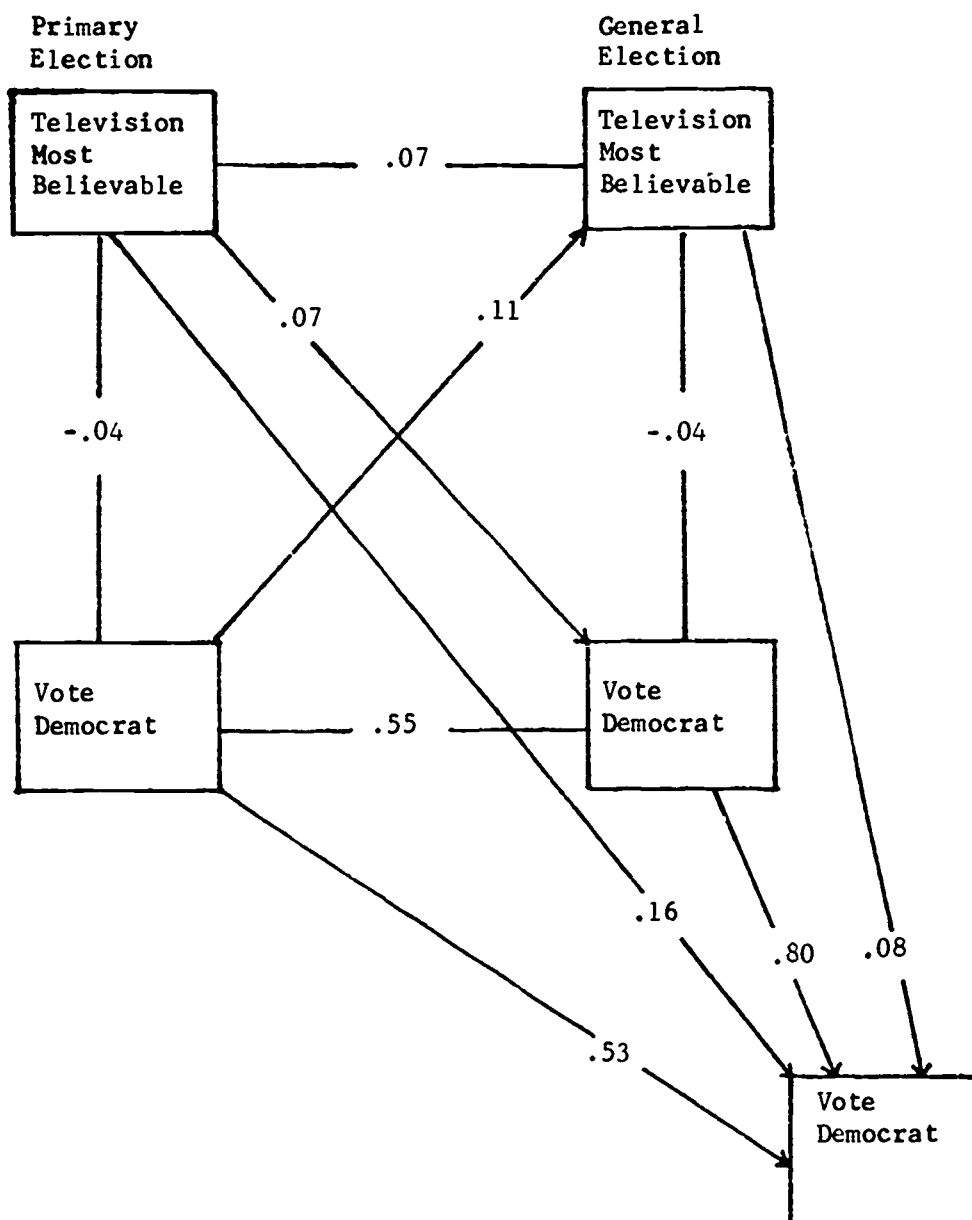


FIGURE 2. Relationships Among Television Believability and Candidate Preference Variables.

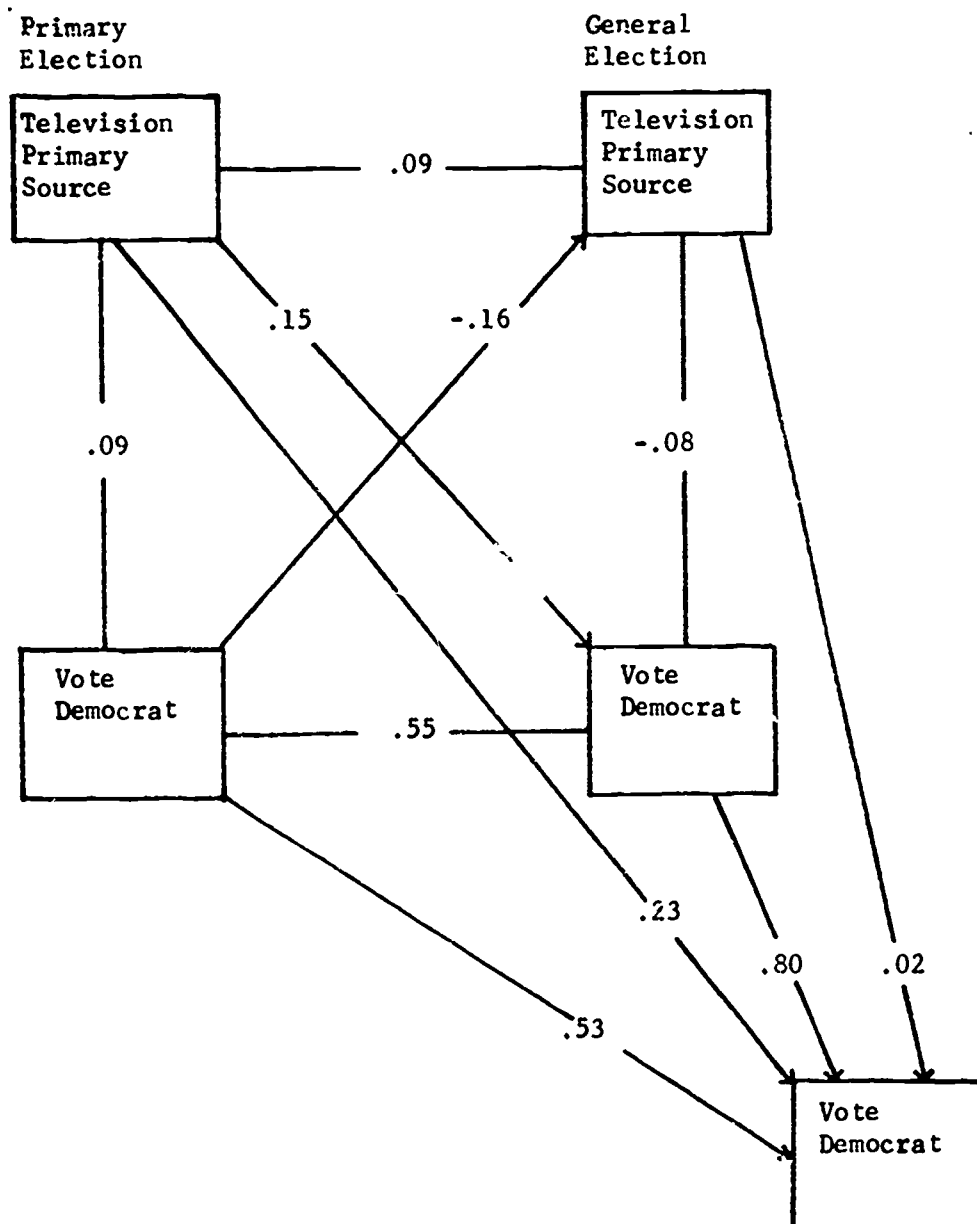


FIGURE 3. Relationships Among Use of Television as a Source of Information and Candidate Preference Variables.

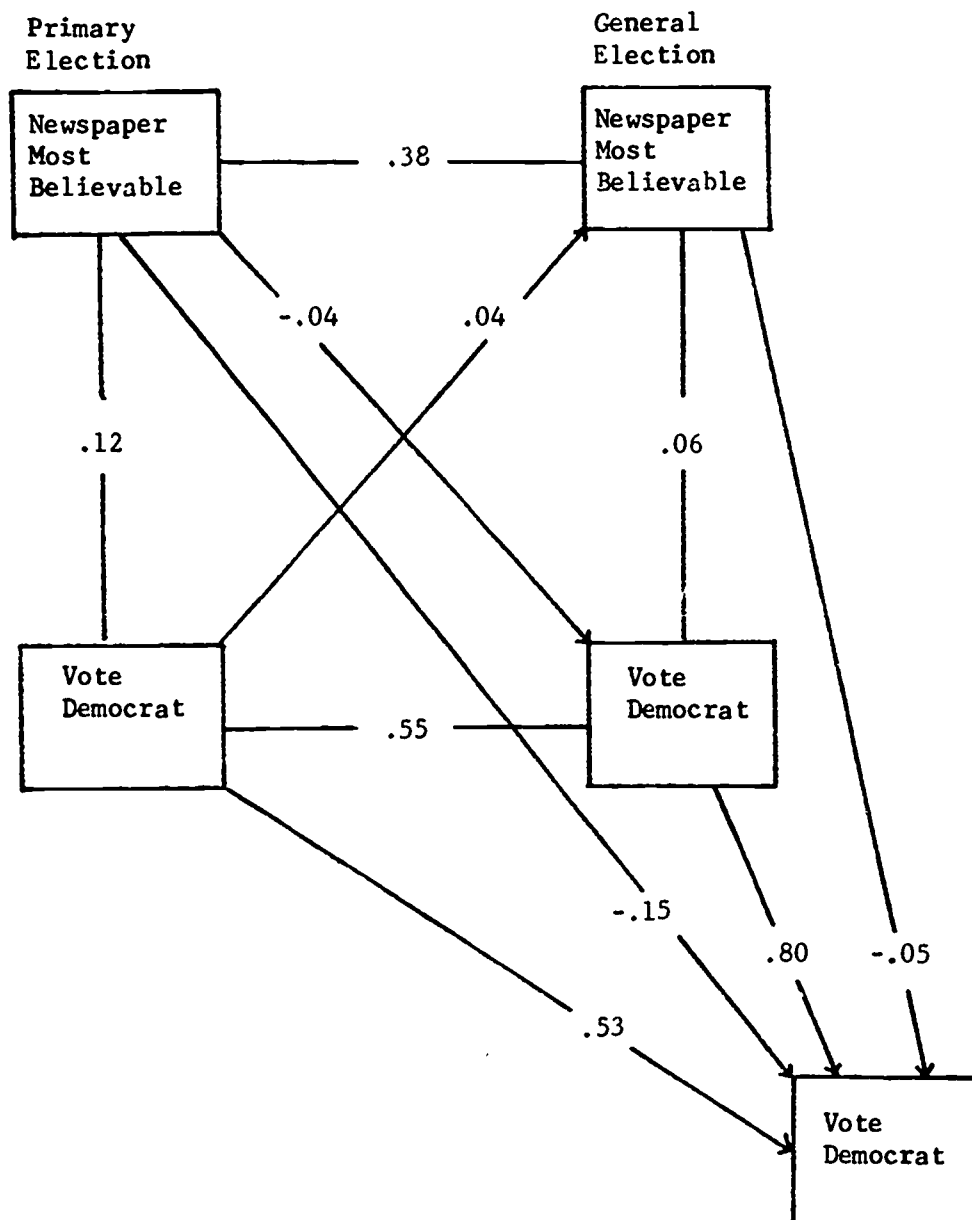


FIGURE 4. Relationships Among Newspaper Credibility and Candidate Preference Variables.

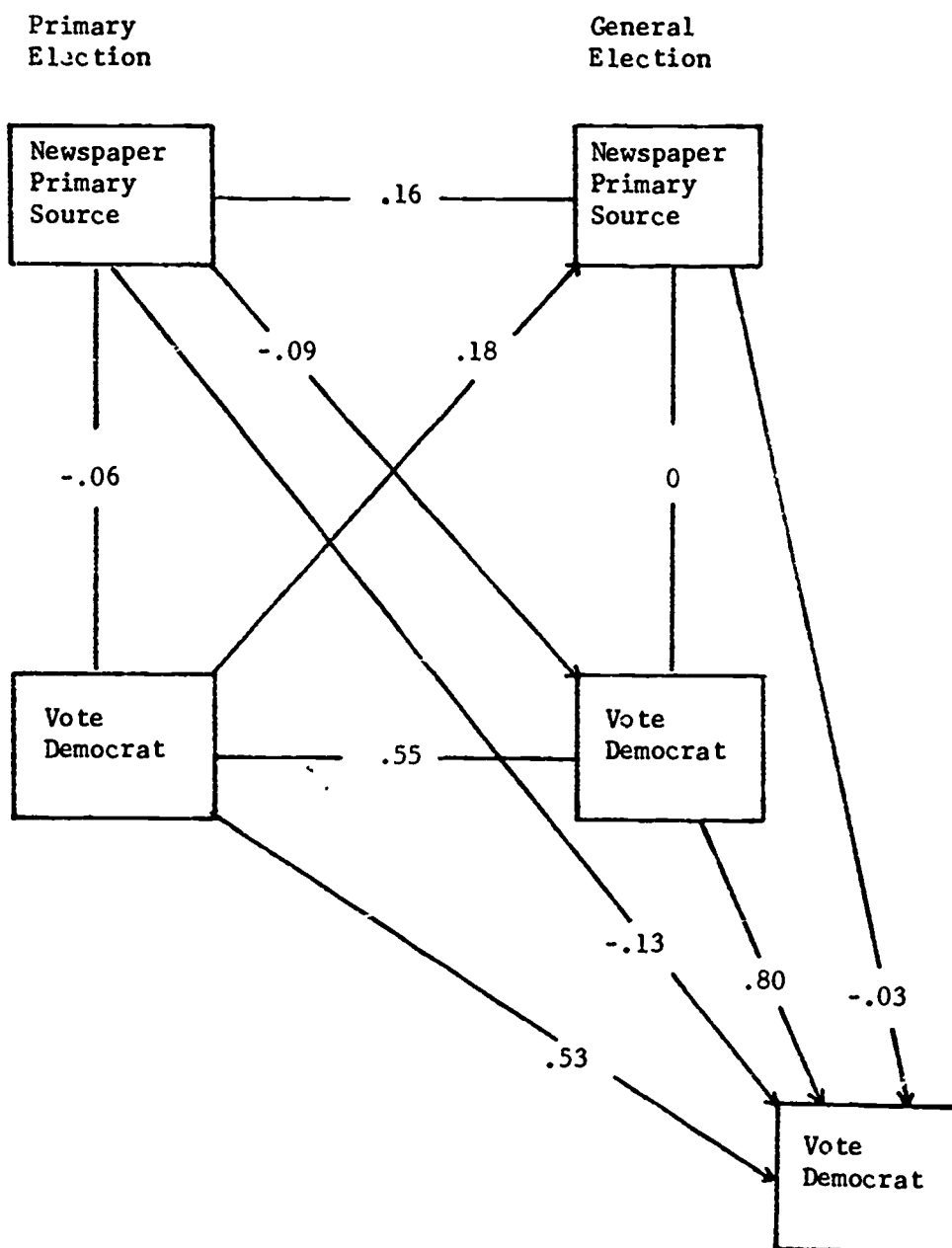


FIGURE 5. Relationships Among Use of Newspapers as a Source of Information and Candidate Preference Variables.

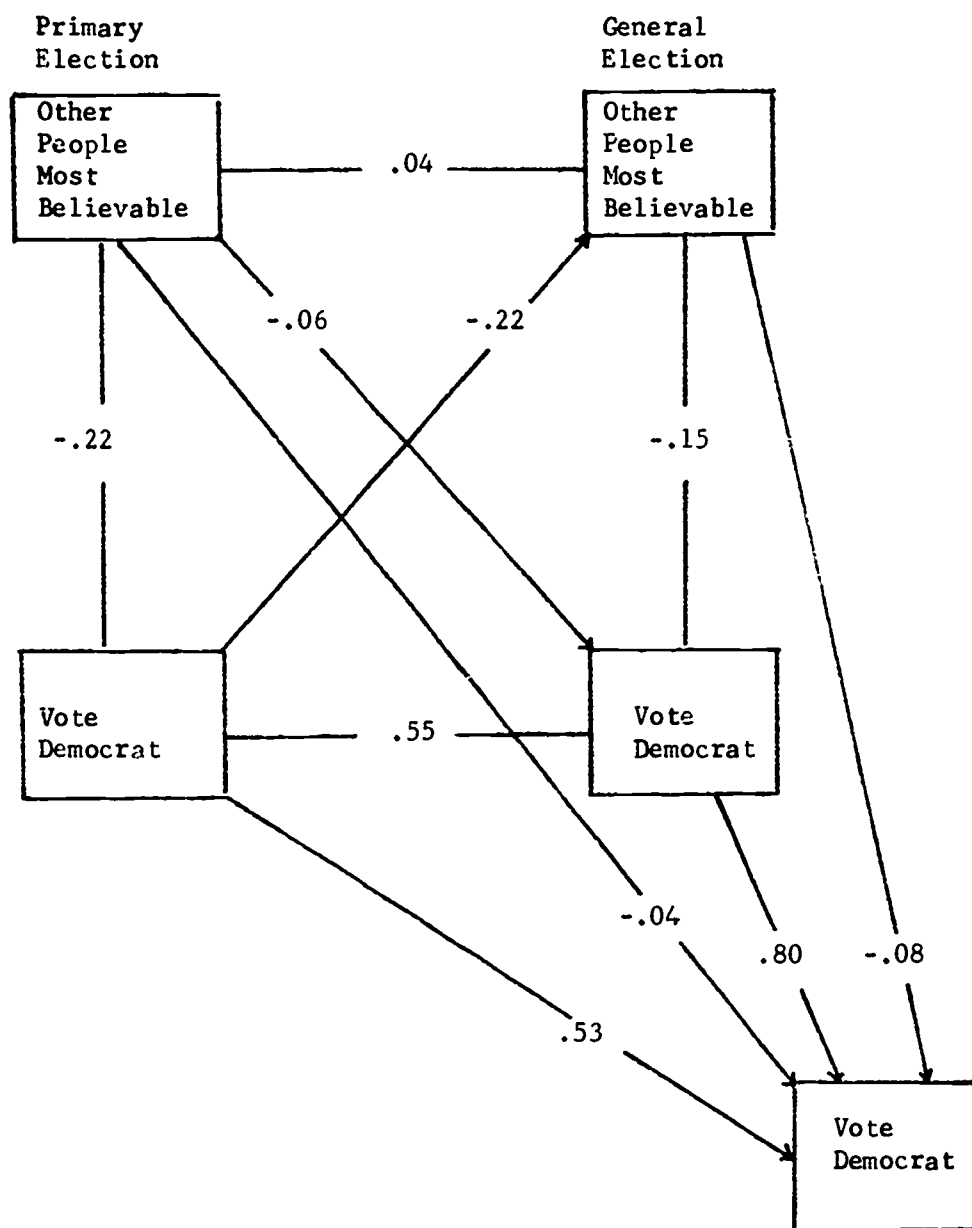


FIGURE 6. Relationships Among Credibility of Other People and Candidate Preference Variables.

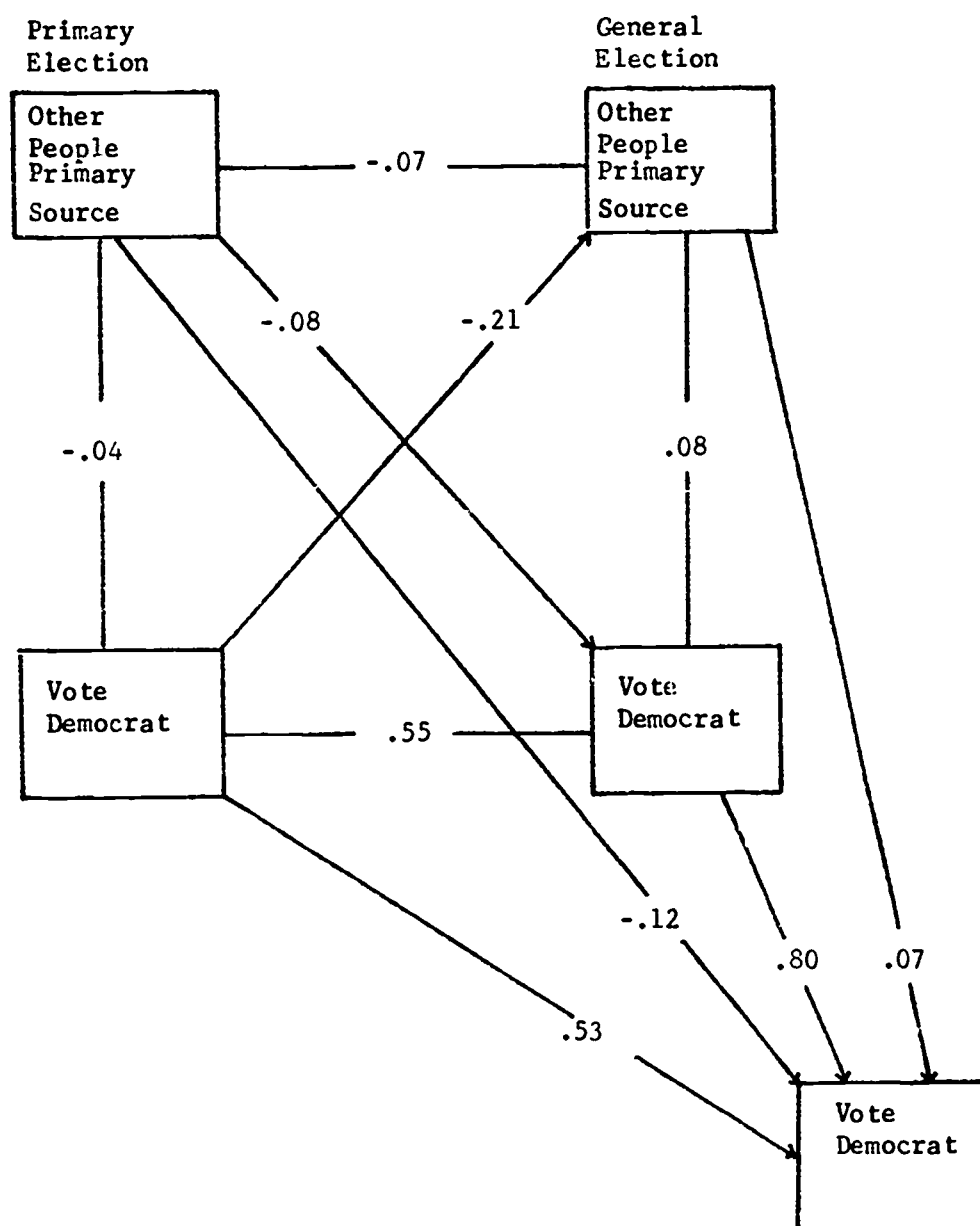


FIGURE 7. Relationships Among Use of Other People as Sources of Information and Candidate Preference Variables.